# Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

### **ENVIRONMENTAL ASSESSMENT**

For Routine Actions with Limited Environmental Impact

#### **Part I. Proposed Action Description**

- 1. Applicant/Contact name and address: Spring Creek Coal, LLC, PO Box 67 Lakeshore Drive, Decker, MT 59025
- 2. Type of action: Application to Change an Existing Non-irrigation Water Right 42B 30110187
- 3. Water source name: Groundwater
- 4. Location affected by project: Sections 13, 14, 15, 25, 26, 27, 36 T8S R39E and sections 30, 31 T8S R40E.
- 5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to change the point of diversion from five wells to the active mining pits in Sections 13, 14, 15, 25, 26, 27, 36, T8S, R39E and Sections 30 and 31, T8S, R40E, Big Horn County, for industrial use from January 1 through December 31. The Applicant proposes to change the place of use to the present and proposed mine site generally located in Sections 13, 14, 15, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, and 36, T8S, R39E, Sections 19, 29, 30, 31, 32, T8S, R40E, Section 6, T9S, R40E, Section 3, 4, 9, 10, 15, 16, 21, 22, 28, 29, 32, and 33, T9S, R39E and Section 1, T10S, R38E, Big Horn County. The Applicant proposes to change the place of storage to include existing reservoirs in use at the mine. Groundwater seeps into mining pits as part of ongoing mining operations. This application is to use the water seeping into mine pits for beneficial use. Because there are several mine pits and because the location of mine pits changes over the life of the mine, points of diversion will migrate over time. This environmental assessment is not for coal mining but only for the change in water use. The DNRC shall issue a change authorization if the applicant proves the criteria in 85-2-402 MCA are met.
- 6. Agencies consulted during preparation of the Environmental Assessment:

(include agencies with overlapping jurisdiction)

Montana Department of Fish, Wildlife, and Parks

Montana Department of Environmental Quality

United States Fish and Wildlife Service

Montana Natural Heritage Program

United States Department of Agriculture, National Resource Conservation Service United States Bureau of Land Management

Montana Department of Natural Resources and Conservation

### Part II. Environmental Review

## 1. Environmental Impact Checklist:

### PHYSICAL ENVIRONMENT

#### WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> – Groundwater in the area of impact is hydraulically connected to surface water in Spring Creek and Pearson Creek. Neither of these creeks is identified as a chronically or periodically dewatered stream by the Department of Fish, Wildlife, and Parks. The creeks are ephemeral flowing only during snow melt and precipitation events. The groundwater is also hydraulically connected to the Tongue River and the Tongue River Reservoir. The Spring Creek Mine will create mine pits and pump groundwater from them under their mining permit regardless of whether or not they have a beneficial use permit. A Montana Department of Natural Resources and Conservation hydrogeologist determined that there is no net effect to the Tongue River and Tongue River Reservoir as a result of the proposed project.

Determination: No Impact

*Water quality* – Discharge of water used on the mine site is regulated under the mining permit.

Determination: No Impact

<u>Groundwater</u> – The proposed project is only to beneficially use groundwater that naturally flows into mine pits and is currently pumped from those pits to allow mining. No additional drawdown will occur from the beneficial use of water removed from the mine pits.

Determination: No Impact.

<u>DIVERSION WORKS</u> – The project proposes to use water that seeps into mine pits. No diversion works will be constructed specific to a beneficial use permit. The mine pits impact surface channels, modify flow and dewater hydraulically connected creeks. Because the mine pits will be constructed under the Spring Creek mine permit, the beneficial use permit will not add any impact. The beneficial use of water from the mine pits would be by truck mounted mobile pumps with little to no impact. The only difference in diversion under this project would be to pump the water from the active mining pits to storage areas for beneficial use instead of pumping it to evaporation, infiltration and outlet holding ponds.

Determination: No Impact.

#### UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> – Sixteen species of animal were listed as sensitive by either the United States Forest Service or the United States Bureau of Land Management according to the Montana Natural Heritage Program on 12/30/2014. This included the

Townsends Big-eared Bat, the Black-tailed Prairie Dog, the Fringed Myotis, the Golden Eagle, the Burrowing Owl, the Greater Sage Grouse, the Loggerhead Shrike, the Sage Thrasher, the Brewer's Sparrow, the Snapping Turtle, the Plains Hog-nosed Snake, the Western Milksnake, the Greater Short-horned Lizard, the Great Plains Toad, the Plains Spadefoot and the Sauger. The only listed plant species of concern in the potentially impacted area is Barr's Milkvetch. The Yellow-billed Cockoo is listed as threatened and a species of special status. Coal mining, in general, may impact these species but the beneficial use of water resulting from mine operations adds no impact.

Determination: No Impact.

<u>Wetlands</u> – There are no wetlands in the area of the project with the notable exception of the Tongue River Reservoir.

Determination: No Impact.

<u>Ponds</u> – There are no natural ponds in the potentially impacted area. The mine has artificially created several small ponds as part of mining operations.

Determination: No Impact.

<u>GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE</u> – The primary soil types in the project area are hilly Midway-Thedalund complex, Thedalund – Wibaux stony loam and Wibaux – Sprearman complex. These soils are non-saline, well to excessively drained and dominantly composed of loam. Slopes in the area can be significant. The use of groundwater seeping into mine pits will not cause saline seep or decrease soil stability.

Determination: No Impact.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> — The current vegetative cover in the area is limited due to arid climate. There are scrub Junipers, some riparian grasses and dryland prairie grass. Mining would remove some vegetation and mining equipment could introduce or spread noxious weeds. It will be the responsibility of the land owner to monitor and control noxious weeds.

Determination: No Impact.

<u>AIR QUALITY</u> – The use of water naturally occurring in mine pits has no potential to impact air quality. One of the proposed uses of the water is dust suppression.

Determination: No Impact.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> – The project area contains several land parcels that are owned by the United States Bureau of Land Management. Doug Melton from the Miles City Field Office was contacted and stated that there are many cultural and some historic sites in the area. A full listing of these sites is available from the Montana State Historic Preservation Office. The sites have been inventoried since the 1970's and some that are impacted by the mine are being mitigated. The specific use of water requested by this application for dust suppression and

equipment washing will not impact the historical or archeological sites except that the water allows the mine to operate.

Determination: Possible Impact.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> – Because of the proximity of the groundwater to the place of use, the mine will use less energy pumping water from mine pits than they currently use pumping from the Tongue River Reservoir.

Determination: No Impact.

### **HUMAN ENVIRONMENT**

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - There are no known local environmental plans and goals. The mine is governed by a State of Montana mining permit that addresses reclamation and environmental requirements.

Determination: No Impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - The proposed mine site is not served by public roads and is not a designated wilderness or recreational site. The Tongue River Reservoir is only a few miles to the east but no access to the reservoir crosses the project area and the beneficial use of mine seepage would not alter the quality of local recreation.

Determination: No Impact.

<u>HUMAN HEALTH</u> - There are no predicted impacts on human health from the beneficial use of water pumped from active mine pits.

Determination: No Impact.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes\_\_\_ No\_X\_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: Not Applicable.

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>? No Significant Impact.
- (b) <u>Local and state tax base and tax revenues</u>? No Significant Impact.

- (c) Existing land uses? No Significant Impact.
- (d) Quantity and distribution of employment? No Significant Impact.
- (e) <u>Distribution and density of population and housing</u>? No Significant Impact.
- (f) Demands for government services? No Significant Impact.
- (g) Industrial and commercial activity? No Significant Impact.
- (h) Utilities? No Significant Impact.
- (i) <u>Transportation</u>? No Significant Impact.
- (j) <u>Safety</u>? No Significant Impact.
- (k) Other appropriate social and economic circumstances? No Significant Impact.
- 2. Secondary and cumulative impacts on the physical environment and human population:

<u>Secondary Impacts</u>: No secondary impacts resulting from the beneficial use of groundwater that seeps into mine pits are recognized.

<u>Cumulative Impacts</u>: No cumulative impacts are recognized.

- 3. Describe any mitigation/stipulation measures: None
- 4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: The only alternative to the project as proposed is the no action alternative. The no-action alternative would only preclude the applicant from using the water that seeps into mine pits created as part of their mining operations. The no-action alternative would prevent the applicant from acquiring a dependable water source and saving energy costs associated with pumping water.

#### PART III. Conclusion

- 1. **Preferred Alternative:** Issue a change authorization if an applicant proves the criteria in 85-2-311 MCA are met.
- 2 Comments and Responses: None
- 3. Finding:

Yes\_\_\_ No\_\_X\_ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: An environmental assessment is the appropriate level of analysis for this proposed action because no significant impacts were indicated from specifically using seepage water at the mine for beneficial use.

*Name of person(s) responsible for preparation of EA:* 

Name: Mark Elison

*Title:* Hydrologist/Specialist

Date: 5/30/2017